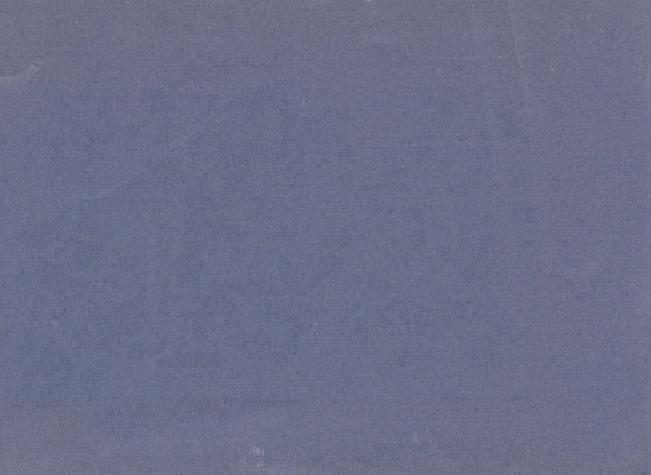
HILES AND RASPS AND X.F. SWISS PATTERN FILES





NICHOLSON FILE COMPANY . PROVIDENCE 1, RHODE ISLAND, U. S. A.



PROVIDENCE 1, RHODE ISLAND, U.S.A.



FILES · RASPS



.1945.

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HISTORICAL SKETCH

The main plant and general executive offices of the Nicholson File Company are located a short distance from the center of the city of Providence. They are of thoroughly modern construction, well lighted and ventilated, and designed especially for the manufacture of files. They are equipped with special machines and appliances, the principles of which were conceived by Mr. William T. Nicholson, the founder of the Nicholson File Company and the successful developer of the machine-file-making industry.

Mr. Nicholson's early business experience was in the machine tool business, where he developed the idea of constructing a file cutting machine. As he progressed with his new idea he became greatly enthused over the possibilities of such a machine and in order to be thoroughly informed regarding the file industry went to Europe which at that time supplied most of the files used in America. There he studied not only the manufacture and use of files but also such kindred industries as the manufacture and heat treatment of steel, and he returned only when he felt sufficiently informed on the subject to establish his own file factory.

In 1864 the Nicholson File Company was incorporated and its first plant erected immediately at Providence. It was hoped at the time that a daily production of 300 dozen files might be reached, but business was not easily obtained. Several similar enterprises were attempting to cut files by machine, and the resulting products

were of very inferior quality and were being offered by makers of hand cut files as convincing examples of the failure of file cutting by machinery.

The superior quality of the new Nicholson Files gradually became an acknowledged fact, the antagonism towards machine cut files diminished, and the output of the works slowly increased until over three hundred dozen files a day were being manufactured. Nicholson Files in a few years had become the standard in America, and hand cut files were a thing of the past.

In 1870 the first of a series of very complete catalogs was published, and in 1878 Mr. Nicholson wrote a treatise on files and their proper selection and use, which as "File Filosophy" is now in the first printing of its sixteenth edition.

Mr. Nicholson, at the time of his death in October 1893, had seen the output of his works increased to over 1500 dozen files daily, and he had established an organization which has since developed the Company until it now operates four large plants in the United States and Canada which turn out many thousands of dozens of files a day.

Colonel Samuel M. Nicholson, son of the founder, devoted his entire business life to the manufacture of files and managed the Company from 1893 to the time of his death in 1939. Under his leadership the Nicholson File Company became the largest company in the world manu-

facturing exclusively Files and Rasps. Whereas the founder was a pioneer in the science of cutting files by machinery, Colonel Nicholson was a pioneer exporter of files and as a result Nicholson Files are to be found in every market of the world.

Mr. Paul C. Nicholson, grandson of the founder, has been very active in the management since 1911. Upon the death of Colonel Samuel M. Nicholson he was elected president and general manager of the Company. He has devoted much of his time to the development of scientific methods for improving the quality and testing the efficiency of files and toward that end has established and personally interested himself in exceptionally well equipped testing and experimental research departments.

Mr. Paul C. Nicholson, Jr. joined Nicholson File Company immediately following his graduation from Sheffield Scientific School of Yale University in 1940.

The principal factory of the Company is located at Providence and large branch factories are at Philadelphia, Pa., Anderson, Indiana, and Port Hope, Ontario. At the Providence factory are manufactured the full lines of Nicholson, Black Diamond and McCaffrey Brands of Files and Rasps, a complete line of Nicholson X.F. Swiss Pattern Files and various associated

products such as File Handles, Holders, and Cleaners. Nicholson, Black Diamond and McCaffrey Files and Rasps and Nicholson X.F. Swiss Pattern Files represent the very highest quality product of this Company. The manufacture of Nicholson X.F. Swiss Pattern Files was first started in 1893 and is carried on in a thoroughly modern plant equipped with the finest tools and machinery to assure the production of Swiss Pattern Files of a quality that will give entire satisfaction to the exacting requirements of iewelers, watch makers and fine tool makers.

At the Philadelphia and Anderson plants are manufactured many brands of commercial grade files. These are first quality files, although not of the highest grade such as the Nicholson, Black Diamond and McCaffrey, and are sold

under the following brands: American, Arcade, Eagle, Great Western, Kearney & Foot, Mc-Clellan and J. Barton Smith.

At the Port Hope, Ontario, plant Black Diamond Files are manufactured for the Canadian trade, together with the brands of commercial grade. Nicholson X.F. Swiss Pattern Files are made in Providence but sold to Canadian customers through the Port Hope factory.



WILLIAM T. NICHOLSON, Founder

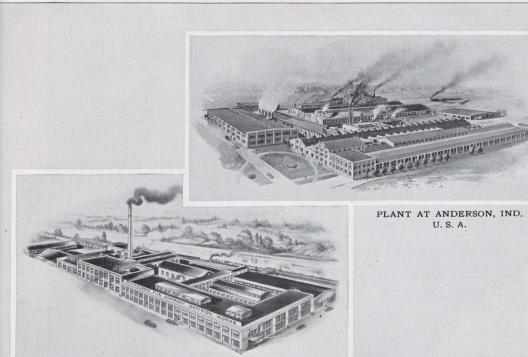
NICHOLSON FILE COMPANY JUNE, 1945



PLANT AT PROVIDENCE, R. I. U. S. A.



PLANT AT PHILADELPHIA, PA. U.S.A.



PLANT AT PORT HOPE, ONT. CANADA

Page 5

PATENTED

For Faster Filing on Soft Irons and Steels

For rapid filing of soft irons and steels, we recommend our Patented Tooth Construction known as "Controlled Serrations." This means that each tooth point is subdivided into extra cutting edges which permit the file to take hold of the stock from the first stroke and to remove more metal than ordinary files.

An added feature of this Tooth Construction is the elimination of the tendency of old style files to skid or slide from the line of work.

NICHOLSON PATENTED FILE TEETH

Cut Faster, Last Longer
Do Not Ride Off the Line of Work

GENERAL INFORMATION

RILES and Rasps are made of high carbon steel of special analysis which is made under careful supervision and subjected to the most rigid inspections and tests. Skilled and careful attention is constantly given to this most important requisite of the highest quality product. The Nicholson File Company possesses facilities for manufacturing Files and Rasps which are unequaled by any other file factory in the world. Its extensive buildings were designed especially for the manufacture of Files and Rasps. Special machinery and methods of manufacture, which are the result of constant researches and inventions throughout the life of the Company, insure a completed product that is unexcelled.

Each process of manufacture is given highly skilled supervision and critical inspection while the work is being performed, resulting in a uniformity of product and a high excellence of quality.

Files and Rasps have three distinguishing features:

First—Their Length, which is always measured exclusive of the tang.

Second—Their Kind or Name, which has reference to the shape or style.

Third—Their Cut, which has reference not only to the character but also to the coarseness of the teeth.

This catalogue is designed to be of service to all those who distribute or use Files and Rasps. It is not our intention to illustrate in full detail our entire product but rather to present sufficient illustrations of various types of Files and Rasps, with definite information concerning each, to make the book instructive and easily understood

For convenience of reference we have grouped our product, all illustrated in this catalogue, into several classes as indicated below:

First—The Saw File Group, comprising the kinds of files whose particular use is in sharpening or filing saws of various descriptions. This includes Mill Files, Triangular or Three Cornered Saw Files and Saw Files of special sections.

Second—The Machinists' Files, comprising those kinds generally used in machine shop practice, including the various styles of Flat, Hand, Half Round, Round, Square, Pillar, Warding, Knife, etc.

Third—Rasps of Various Types. This group comprising Cabinet Rasps, Shoe Rasps, Wood Rasps and Horse Rasps.

Fourth—A complete line of Swiss Pattern Files and Rifflers.

Fifth—An assortment of Tools and Specialties manufactured by this Company.



MILL FILES

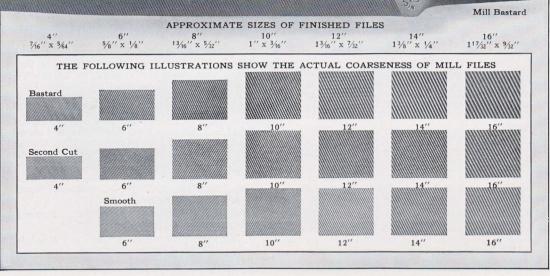
Mill Files are used principally for filing mill or circular saws, also planer knives and mowing machine knives; for lathe work, draw-filing and for finishing compositions of brass and bronze.



Tapered slightly in thickness and in width for about one-third of their length.

Usually made with two square edges. Single cut.

Made in Bastard cut in lengths of 4, 6, 7, 8, 10, 12, 14 and 16 inches; in Second Cut in lengths of 6, 8, 10, 12 and 14 inches; and in Smooth cut in lengths of 6, 8, 10, 12 and 14 inches;





MILL FILES-Continued

Mill Files are also made with two round edges for filing the gullet or space between the saw teeth. These files made in Bastard cut only. Mill Files with two round edges come in lengths of 6, 8 and 10 inches.



Mill Bastard, 2 Round Edges



Special Crosscut or Mill Blunt Bastard

The file shown just above illustrates both the Mill Blunt Bastard and the Special Crosscut File. Both types are cut like a Mill Bastard, but are parallel in width and thickness. Made in lengths of 6, 7, 8 and 10 inches.

The Mill Blunt Bastard File is used wherever the filer prefers a Mill File which does not taper in width and thickness.

The 6" size, for example, is often used for filing bucksaws.

The Special Crosscut File, however, has teeth which are specially sharpened for use on Crosscut Saws and works with a smoothness which is evident from the first stroke. The tang is painted orange. Each file is cellophane wrapped. Packed one dozen in orange colored box.



HANDSAW AND BANDSAW FILES

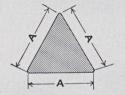


TRIANGULAR OR THREE CORNERED-60-DEGREE ANGLES

Made for filing all types of saws having 60° angle teeth.

Handsaw files are usually single cut and have edges that are set and cut for filing the gullet between the saw teeth.

Bandsaw files are single cut and have rounded edges. Some Bandsaws have well rounded gullets between their teeth and these files are preferred for sharpening this type of saw. Bandsaw files are made of the same sections of steel as Handsaw files but because the edges are rounded, the finished files are slightly smaller in width.



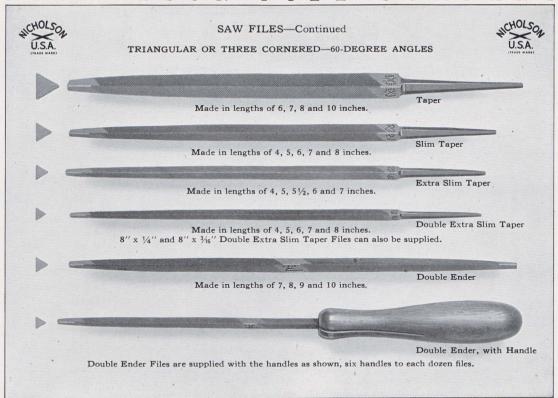
Dimension "A" is equal for all sides or widths

RULE FOR THE SELECTION OF SAW FILES

Select a file whose width, or flat side, is equal to a little more than twice the depth of the saw tooth.

APPROXIMATE SIZES OF HANDSAW AND BANDSAW FILES

KIND	4"	41/2"	5''	51/2"	6''	7"	8"	9"	10"
Bandsaw Blunt					1/3"		5/8"		
Bandsaw Blunt Slim									
Taper					1/2"	9/16"	5/8"		3/4"
Slim Taper					3/8"	13/32"	1/2"		
Extra Slim Taper					9/32"	11/32"			
Double Extra Slim Taper					7/32"	7 / 14	5/16"	11///	3/11
Double Ender						1/32	9/32"	11/32"	3/8"





SAW FILES-Continued

TRIANGULAR OR THREE CORNERED-60-DEGREE ANGLES



DISCONTINUED

Handsaw Blunt

Single cut—Made in 6 inch length.

Handsaw Blunt Slim

Single cut-Made in lengths of 51/2, 6 and 7 inches.

Handsaw Blunt Extra Slim

Handsaw Blunt Slim and Handsaw Blunt Extra Slim Files are frequently preferred by carpenters and expert saw filers for sharpening handsaws. These files are also widely used in machines for sharpening saws.

Bandsaw

Single cut-Made in lengths of 6 and 8 inches, in Blunt only.

Single cut-Made in lengths of 6 and 8 inches.

Bandsaw Blunt Slim

Bandsaw Files are designed particularly for sharpening Bandsaws which have well rounded gullets between the teeth. Handsaw Blunt Extra Slim Files may also be obtained with round tangs for insertion in special handles. These are called Weed's Special Files and are made in 5, 5½ and 6-inch lengths and packed one dozen files and four handles to a box. Special list prices and folders sent on request.

I C H O L S O N F I L E



MISCELLANEOUS SAW FILES





Crosscut

APPROXIMATE SIZES OF FINISHED FILES

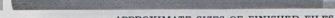
Single cut-Made in lengths of 8 and 10 inches. Same number of teeth per inch as Mill Bastard Files of the same lengths. Used for sharpening crosscut saws of the Great American style—the rounded backs being used to deepen the rounded gullets of the saw teeth.



Cantsaw

APPROXIMATE SIZES OF FINISHED FILES

Single cut-Made in lengths of 6, 8 and 10 inches. Same number of teeth per inch as Mill Bastard Files of the same lengths Used for sharpening crosscut saws with the "M" teeth. Sometimes called Lightning Saw Files.



Pitsaw

APPROXIMATE SIZES OF FINISHED FILES

Single cut-Made in lengths of 6 and 8 inches. Used for sharpening pit or frame saws. Cut slightly coarser than Mill Bastard Files of the same lengths.



FLAT FILES



Flat Files are used by machinists, machinery builders, ship and engine builders, repair men and others who require rapid removal of metal. They are rectangular in cross section and taper slightly towards point in both width and thickness. Double cut on both sides, single cut on both edges. Made in Bastard, Second Cut and Smooth in lengths of 4, 6, 8, 10, 12, 14 and 16 inches, In Bastard cut in 18".

Flat Bastard

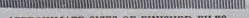
APPROXIMATE SIZES OF FINISHED FILES

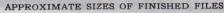
4". 6" 8" 10" 12" 14" 16" 7/6" x 7/6" x 5/2" 13/6" x 7/2" 1" x 1/4" 13/6" x 17/4" 13/6" x 11/4" 11/1/2" x 11/2"

16" 18" 18" x 11/2" x 23/2" x

FLAT LEAD FLOAT FILES

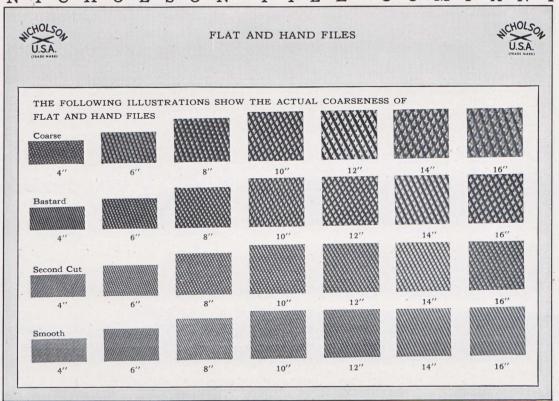
Flat Lead Float Files are especially designed for use on lead, babbitt and other soft metals. They are made in lengths of 8, 10 and 12 inches.





8" 10" 12" 13/6" x 7/32" 1" x 1/4" 13/6" x 17/64"

Flat Lead Float



HOLSON ILE F



HALF ROUND FILES



Generally used by machinists, engineers and repair men and because of the section being rounded on one side and flat on the other are extremely useful files.

The cuts on the flat side are graded in coarseness like Flat and Hand Files shown on the preceding page. The cuts on the backs are graded in coarseness like the illustrations shown on the following page.

Half Round Files are made in Bastard. Second Cut and Smooth cuts, and in lengths of 4, 6, 8, 10, 12, 14 and 16 inches.

Half Round Bastard

APPROXIMATE SIZES OF FINISHED FILES

3/4" x 7/32" 15/16" x 9/32" 11/8" x 11/32"

14"

16"

HALF ROUND LEAD FLOAT FILES

Half Round Lead Float Files are made for use on lead, babbitt and other soft metals. They are made in lengths of 8, 10 and 12 inches.

Half Round Lead Float

APPROXIMATE SIZES OF FINISHED FILES

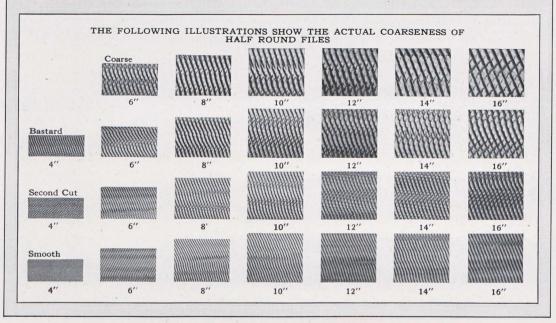
3/4" x 7/32" 15/16" x 9/32" 11/8" x 11/32"



HALF ROUND FILES



The backs of all Half Round Bastard Files are double cut. The backs of all Half Round Second Cut Files longer than 6 inches are double cut, the 4 and 6-inch files are single cut. The backs of all Half Round Smooth Files are single cut. The flat sides of all Half Round Files are double cut.





FLAT AND HALF ROUND BRASS FILES



The filing of brass, copper, bronze and similar metals requires a special type of file. While these metals are softer than steel they are also more malleable and are very ductile and tough. These Brass Files are very sharp and should be used with as little pressure as is needed to keep them cutting. Available in Grade A only.

Made in Flat and Half Round sections in lengths of 8, 10 and 12 inches.

Flat Brass File

APPROXIMATE SIZES OF FINISHED FILES 8" 10" 12" 12" 13/16" x 7/3" 1" x 1/4" 13/16" x 17/6"

Half Round Brass File

APPROXIMATE SIZES OF FINISHED FILES

8" 10" 12" 3/4" x ⁷/₃₂" ¹⁵/₁₆" x ⁹/₃₂" 11/₈" x ¹/₃₂"

SHEAR TOOTH FILES

Shear Tooth Files are for use on aluminum, copper, brass and similar metals. May also be used on cast iron and steel. They remove material rapidly and leave a very smooth finish. Are single cut with a long angle and are furnished in Flat and Half Round sections in lengths of 6, 8, 10, 12 and 14 inches.

Flat Shear Tooth File

APPROXIMATE SIZES OF FINISHED FLAT SHEAR TOOTH FILES 8" 10" 12" 12" 13/6" x ½" 1" x ¼" 13/6" x 17/64"

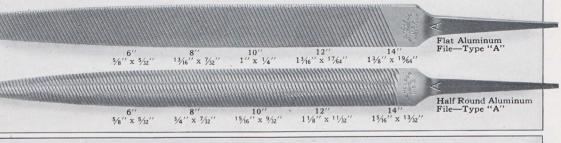
13/8" x 19/64"



FLAT AND HALF ROUND ALUMINUM FILES-TYPE "A"

Best suited for filing aluminum or aluminum alloy castings. These files cut rapidly without clogging. All are of one coarseness of cut, regardless of the shape or size of the file. A smooth finish can easily be obtained by filing with a shearing cut toward the left. Half Rounds have fine points. Available in Grade A only.

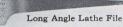




LONG ANGLE LATHE FILES

Specially designed for lathe filing and for bench filing on aluminum and compositions of brass, bronze and similar metals.

Long Angle Lathe Files are made on Flat File blanks. Cut on sides only with both edges safe or uncut. The Flat Long Angle Lathe Files are made in lengths of 10, 12 and 14 inches.



APPROXIMATE SIZES OF FINISHED FILES

10" 1" x 1/4" 12" 13/16" x 17/64" 14" 13/8" x 19/64"



FLAT ALUMINUM Nos. 75 AND 76



DISCONTINUED

FLAT ARMORY CUT FILES No. 204

This file is made in the 12" length only and is designed for body builders for filing sheet aluminum and sheet steel. Also used for lathe filing and by gun makers for finishing gun barrels. The teeth of this file are very quick cutting, clear themselves readily, and produce a smooth finish. Dimensions are the same as 12" Flat Bastard Files.

APPROXIMATE SIZE OF FINISHED FILE: 12"—13/16" x 17/44"

12" Flat Armory Cut

DOCTOR BLADE FILES

Designed for filing Doctor Blades in the cloth printing industry. They are made 14 inches in length on Hand Blunt blanks without tang. They are double cut and are made in two degrees of coarseness, Coarse cut and Smooth cut.

APPROXIMATE SIZE OF FINISHED FILE: 14"-13%" x 19%4"

14" Doctor Blade File



HAND FILES



Widely used by machinists and machinery builders for filing flat surfaces. Hand Files are of rectangular cross-section and are parallel in width and taper slightly in thickness. They are cut on both flat sides but on one edge only. Made in Bastard, Second Cut and Smooth cuts in lengths of 6, 8, 10, 12 and 14 inches and in Bastard cut only in the 16 inch size.



Hand Bastard

APPROXIMATE SIZES OF FINISHED FILES

6" 8" 10" 12" 14" 16" 16" 5%" x 5½" 13/6" x 7½" 1" x 1¼" 13/6" x 17/64" 13/6" x 19/4" 117/2" x 11/22

Note: For illustrations showing Coarseness of Hand Files see page 15.

HAND FINISHING FILES

Hand Finishing Files are double cut and are used when a very smooth finish is desired. They are rectangular in section and are parallel in width. Tapered slightly in thickness. Made with two safe edges in 12 and 14-inch lengths in Smooth cut only.



APPROXIMATE SIZES OF FINISHED FILES: 12"-13/6" x 17/4"; 14"-13/8" x 19/4"



4" 3/16"

ROUND FILES



Their principal use is to file or enlarge circular openings or to file concave surfaces. Made in Bastard cut in lengths of 4, 6, 7, 8, 10, 12, 14 and 16 inches. In Second Cut and Smooth cuts in lengths of 4, 6, 8, 10, 12 and 14 inches.

Round Files are double cut, in Bastard cut from 6" up; in Second Cut from 12". The rest are single cut.

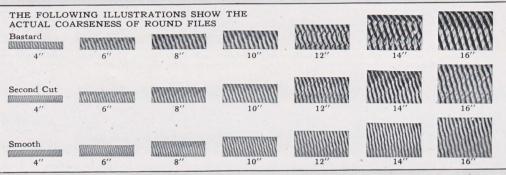
APPI	ROXIMAT	E SIZES	OF FIN	ISHED F	ILES	Round	d Bastard (tapered
6"	7"	8"	10"	12"	14''	16''	
1/4"	17/64"	5/16"	3/8′′	1/2"	5/8"	3/4"	

DISCONTINUED

Round Blunt Bastard

SHOW HADE IN U.S. A.

MADE IN MALA





SOUARE FILES

Used principally for filing keyways, slots and general surface filing. Double cut on all four sides. Made in Bastard cut in lengths of 4, 6, 8, 10, 12, 14, 16 and 18 inches. In Second Cut and Smooth cuts in lengths of 4, 6, 8, 10, 12 and 14 inches.

APPROXIMATE SIZES OF FINISHED FILES



Square Bastard

	4'' 3/16''	1/4" 5/16"	10" 12" 3/8" ½"	5/8′′ 3,	4'' 7/8''	
		I	DISCONTINUED			re Blunt Bastar
THE FOLLOW	VING ILLUSTI OF SQUARE	RATIONS SHOW	THE ACTUAL	AXXXXXXXXX	83333333333	
Bastard 4"	6''	8"	10"	12''	14"	16"
Second Cut	6"	8"	10"	12"	14"	16"
Smooth	0	8	10"	12"	14,	16"

HOLSONF ILE



PILLAR FILES



Are of rectangular section (Proportions being 2 to 1). Principally used by machinists and repair men for filing slots and keyways. They are like the Hand File in general shape. and like the Hand File have one edge "safe." or uncut.

Made in Bastard. Second Cut and Smooth cuts in lengths of 6, 8 and 10 inches and in Bastard cut only in 12-inch length.

The grading of cuts according to coarseness is the same as the Square File.

Piller Besterd

APPROXIMATE SIZES OF FINISHED FILES

7/16" x 7/32"

9/16" x 9/2" 11/16" x 11/2"

12" 13/16" x 13/22"

THREE SOUARE FILES

Are of triangular section like Tapers but are double cut, with the corners left sharp. For general use by machinists for filing internal angles, clearing out corners, filing taps, cutters, etc.

Made in Bastard, Second Cut and Smooth cuts, in lengths of 6, 8 and 10 inches. The grading of cuts according to coarseness is the same as the Square File.

Three Square Bastard

APPROXIMATE SIZES OF FINISHED FILES

6"

10"



WARDING FILES



As their name indicates, their principal use is by locksmiths for filing the ward notches in keys. Also suited for filing in narrow spaces where other files would be too thick. Made in lengths of 4, 6, 8 and 10 inches in Bastard, Second Cut and Smooth cuts. All double cut.

Warding Bastard

APPROXIMATE SIZES OF FINISHED FILES

7/16" x 1/16" 5/8" x 5/64" 25/22" x 3/2"

KNIFE FILES

Are of knife blade section. Used principally by tool and die makers on work having acute angles. Made in lengths of 4, 6, 8 and 10 inches, in Bastard. Second Cut and Smooth cuts. All double cut.

Knife Bastard

APPROXIMATE SIZES OF FINISHED FILES

11/16" x 5/32"

10"



CABINET RASPS

Used by cabinet makers and woodworkers. The curved side of these rasps is similar to that of Half Round Rasps, but of larger radius.



Cabinet Rasps are made in both Second Cut and Smooth cuts in lengths of 6, 8, 10, 12 and 14 inches.



Cabinet Rasp

APPROXIMATE SIZES OF FINISHED FILES AND RASPS

6"

8'' 15/16'' x 1/4'' 10"' 11/8" x 9/32" 12" 15/16" x 11/32" 14" 19/6" x 13/2"

THE FOLLOWING ILLUSTRATIONS SHOW THE ACTUAL COARSENESS OF CABINET RASPS















14"



LAST AND PATTERN MAKERS' CABINET RASPS

Used by shoe last and pattern makers and for all wood filing when a smooth finish is desired such as in the manufacture of wooden golf club heads.



Pattern Makers' Rasps have cut edges while Last Makers' Rasps and Files have safe edges.

All these Rasps and Files have numbers on the tangs for convenience when re-ordering.

A complete list of the many types manufactured will be supplied on request.



Last Makers' Cabinet Rasp-Bastard

Made in half round section as illustrated. Half of each surface file cut, the other half having rasp teeth. Made in lengths of 8, 9 and 10 inches.



APPROXIMATE SIZES OF FINISHED RASPS

8" 7/8" x 7/32" 9" 31/32" x 1/4" 10" 1½6" x 9/32"

PLANER KNIFE FILES

Used for sharpening planer knives and for other similar uses. Made in lengths of 8 and 10 inches. One half of each side is single cut, while the other half is double cut. These files have safe edges.

Planer Knife Files



WOOD RASPS

FLAT AND HALF ROUND SECTION



Are used by woodworkers, wheelwrights, plumbers, etc. Made in Bastard and Smooth cuts and of the same sections of steel as Flat and Half Round Files.

Made in Flat sections in lengths of 8, 10, 12, 14 and 16 inches and in Half Round sections in lengths of 6, 8, 10, 12, 14 and 16 inches.

Coarseness of teeth is the same for Flat and Half Round Rasps of the same size.

Flat Wood Rasp Half Round Wood Rasp THE FOLLOWING ILLUSTRATIONS SHOW THE ACTUAL COARSENESS OF FLAT AND HALF ROUND WOOD RASPS Bastard Smooth 12" 10"



HORSE RASPS



Horse Rasps are made in two different types, Plain Rasps, which are double-ended, and Tanged Rasps. Both types have Rasp teeth on one side and file teeth on the other. Plain Rasps are made in Regular and Slim patterns.

APPROXIMATE SIZES OF FINISHED RASPS

Plain Rasp Plain Rasp—Slim 12" 19/₃₂" x ¹¹/₃₂"

Tanged Rasps are made in Regular and Thin patterns.

14" 1¹7/₃₂" x ³/₈" 16'' 1²³/₃₂'' x ⁷/₁₆'' Plain Horse Rasp

18'' 1¹⁹/₃₂'' x ¹³/₃₂''



Tanged Horse Rasp

APPROXIMATE SIZES OF FINISHED RASPS

Tanged Rasp
Tanged Rasp—Thin

12" 1¹⁷/₃₂" x ³/₈"

14" 1²³/₃₂" x ⁷/₁₆" 1²³/₃₂" x ²³/₆₄

I L E NICHOLSON



ROUND WOOD RASPS AND ROUND CABINET RASPS

Used for the same purpose as Regular Wood and Cabinet Rasps in places for which their shape makes them particularly effective. Each is made in one cut only and in lengths of 6. 8. 10. 12 and 14 inches. Made from steel of the same size as Round Files.



areamount to the

Round Wood Rasp

CHELO MADE IN U.S.A.

APPROXIMATE SIZES OF FINISHED PASPS 10" 14" 6" 5/8"

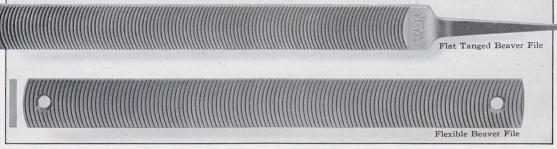
12" 3/9" 1/4"

MADE IN U.S.A. Round Cabinet Rasp

BEAVER CURVED TOOTH FILES

Widely used by the Automobile Manufacturing and Repairing trade on aluminum and sheet steel. Also used on soft metals such as brass and babbitt and often on iron and steel. Because of their curved teeth they free themselves readily of chips. Made in 10, 12 and 14-inch lengths and in three types, Flat Tanged. Half Round Tanged and Flexible.

The 12-inch Flexible have countersunk holes approximately 11 inches between centers and the 14-inch have countersunk holes approximately 13 inches between centers.





NICHOLSON SUPERIOR MILLED TOOTH FILE

Manufactured by Nicholson File Company for those who require top quality in Milled Curved Tooth Files. In three cuts: Standard, Fine and Smooth. Three commonly used types illustrated below. Complete catalog sheet on request.





Flexible Standard

Especially designed for the Auto Body Building and Repair trade. Being very flexible, they are largely used for fender work and for work on curved surfaces of sheet steel and other metals. Made to fit all standard holders.



Flat Standard (Rigid)

Used on many kinds of metals because of their fast-cutting and self-clearing teeth.



Half Round Standard (Rigid)

Used mostly on bearings and flat and concave surfaces of soft metals.



THE NICHOLSON SUPER-SHEAR



A MILLED CURVED TOOTH FILE THAT SMOOTHS AS IT ROUGHS

The Super-Shear is a "double purpose" Milled Curved Tooth File for use on the flat and convex surfaces of aluminum, brass, babbitt, bronze, copper, magnesium, cast iron and soft metal alloys. Made in one degree of coarseness only in lengths of 8, 10, 12 and 14-inch.

Super-Shear

APPROXIMATE SIZES OF THE SUPER-SHEAR

8" 13/16" x 3/16" 10" 1" x 7/32" 12" 1⁷/₃₂" x ⁹/₃₂"

14". 1²³/₆₄" x ⁵/₁₆"

The Curved teeth of the Nicholson Super-Shear are cut in an arc that is "off center" in relation to the axis of the file. This permits the teeth to begin with wide gullets and a right angle—for fast cutting. They become shorter and closer together as they terminate in a long, shearing angle—for producing the smoothing effect. Thus, when a surface is filed with an overlapping stroke in a right-toward-left working direction, the Nicholson Super-Shear "smooths out its tracks as it goes." Practically two files in one!

Fast cutting and smooth finishing in one operation. Easy control of file for accurate work. Easy clearance that saves time and keeps the file efficient.

HOLSO N FILE



FOUNDRY FILES



Developed by us for snagging castings in Foundries and now widely used for removing fins, sprues and other hard projections from castings, for filing narrow and sharp corners of dies and for many other kinds of rough filing. Teeth made extra strong and rugged to stand severe usage.

Made regularly in Bastard cuts, sizes 8" to 14", in Flat and Half Round Shapes, Each file has "Foundry" stamped on it for identification.

Flat Bastard Foundry

APPROXIMATE SIZES OF FINISHED FLAT FOUNDRY FILES

APPROXIMATE SIZES OF FINISHED HALF ROUND FOUNDRY FILES

FILES FOR STAINLESS STEEL

Nicholson File Company now makes files especially for use on Stainless Steel. These files are made in all types and sizes as our regular purpose files, both in American Pattern and Swiss Pattern. The construction of the teeth on files for Stainless Steel is designed to overcome the abrasive action of these steels on any cutting edge. To order, specify type, size and cut and add "for Stainless Steel" to your specification. Regular list prices. Words "Stainless Steel" are stamped on the tang for identification.



NICHOLSON X.F. SWISS PATTERN FILES



- Nicholson X.F. Swiss Pattern Files are made to more exacting measurements than American Pattern Files. Although some cross sections of both types are similar, the shapes differ. The points of X.F. Swiss Pattern Files are smaller and the tapered files have longer tapers than those of American Pattern Files. Nicholson X.F. Swiss Pattern Files are made in much finer cuts, which vary from No. 00, which is the coarsest to No. 6, the finest.
- Our X.F. Swiss Pattern Files are primarily finishing tools, used for removing burrs left over from previous finishing operations, rounding out slots and cleaning out square corners, smoothing up small parts and in fact, doing the final finishing on all sorts of delicate and intricate pieces. The smaller points of these files make them useful for enlarging small holes and shaping and finishing very narrow grooves, slots, notches and keyways.
- X.F. Swiss Pattern Files are used by tool and die makers, delicate instrument parts finishers, jewelers, model makers and home craftsmen. In short, everyone who does superfine precision filing will have many uses for X.F. Swiss Pattern Files.
- Special care is required in the manufacture of X.F. Swiss Pattern Files. They are made in a separate division of our Providence Factory by a staff specially trained for their work. Anyone who buys X.F. Swiss Pattern Files is assured of highest quality under Nicholson's guarantee of "Twelve Perfect Files in Every Dozen."



CHOLSON I L E COMPANY

NICHOLSON SWISS PATTERN FILES

HAND FILES*

NICHOLSON SWISS PATTERN FILES





Hand No 00

Hand Files are parallel in width and taper in thickness. The flat sides are double cut. Hand Files in cuts Nos. 00, 0 and 2 are single cut on one edge, the other edge being safe. Hand Files in cuts Nos. 3, 4 and 6 have two safe edges. Made in lengths of 3, 4, 6, 8, 10 and 12 inches and in cuts Nos, 00, 0, 1, 2, 3, 4 and 6,

APPROXIMATE SIZES OF FINISHED FILES

*6-inch Hand Straight Rowing in cuts Nos. 0, 1, 2 and 4 for corrugating the edges of Barber Shears take same list prices as regular goods. Hand Files finer than No. 2 have two safe edges. Hand Corrugating Files have two safe edges in all cuts.

PILLAR FILES

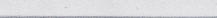














Pillar No. 6

Pillar Files are similar in shape to Hand Files but about two-thirds as wide. Double cut on the two flat sides only, the edges being safe.

Made in lengths of 3, 4, 6, 8, 10 and 12 inches and in cuts Nos. 00, 0, 1, 2, 3, 4 and 6.

APPROXIMATE SIZES OF FINISHED FILES

FILE COMPANY CHOLSON

NICHOLSON SWISS PATTERN FILES

PILLAR NARROW FILES

NICHOLSON SWISS PATTERN FILES

Pillar Narrow No. 2

Pillar Narrow Files are similar to Pillar Files, but narrower for the same length. Double cut on the two flat sides only, the edges being safe.

Made in lengths of 3, 4, 6, 8, 10 and 12 inches and in cuts Nos. 00, 0, 1, 2, 3, 4 and 6.

APPROXIMATE SIZES OF FINISHED FILES

7/3" x 5/4" 17/64" x 7/64" 23/64" x 5/32" 15/32" x 3/16" 9/16" x 1/4" 41/64" x 5/16"

PILLAR EXTRA NARROW FILES

Pillar Extra Narrow No. 4

Pillar Extra Narrow Files similar to Pillar and Pillar Narrow Files but narrower than the Pillar Narrow for their length. Cut on the two flat sides only, the edges being safe.

Made in lengths of 3, 4, 6, 8, 10 and 12 inches and in cuts Nos. 00, 0, 1, 2, 3, 4 and 6.

APPROXIMATE SIZES OF FINISHED FILES

NICHOLSON

THAD

THAD

THAD

THAD

THAD

THAD

THAD

THAD

THAD

SWISS PATTERN FILES

EQUALING FILES

NICHOLSON

TRACE

Equaling No. 0

Equaling Files are parallel in both width and thickness throughout their length. Double cut on the two flat sides and single cut on both edges.

Made in lengths of 3, 4, 6 and 8 inches and in cuts Nos. 00, 0, 1, 2 and 4.

APPROXIMATE SIZES OF FINISHED FILES

3" 4" 6" 8" 8" 5/6" x 1/6" 13/32" x 5/4" 19/32" x 7/4" 3/4" x 9/4"

Equaling Files may be obtained in minimum quantities of one dozen without extra charge in the following B & S gauges:

18 and 20 gauge

16, 18 and 20 gauge

10, 12 and 14 gauge

10 gauge

SOUARE FILES

Square No. 2

Square Files are square in section and taper on all four sides to a fine point. Double cut on all four sides. One safe side when so ordered. Made in lengths of 3, 4, 6, 8, 10 and 12 inches and in cuts Nos. 00, 0, 1, 2, 3 and 4.

APPROXIMATE WIDTH OF FINISHED FILES

3" 4" 6" 8" 10" 12" 564" 1/8" 3/6" 1/4" 11/32" 7/6"

HOLSON FILE COMP

NICHOLSON SWISS PATTERN FILES

WARDING FILES

NICHOLSON SWISS PATTERN FILES



Warding No. 00

Warding Files are rectangular in section with thickness approximately one-eighth of their width, tapering to a point in width and tapering slightly in thickness. Double cut on the two flat sides and single cut on both edges. Made in lengths of 3, 4, 6, 8 and 10 inches and in cuts Nos. 00, 0, 1, 2 and 4.

APPROXIMATE SIZES OF FINISHED FILES

Warding Files may be obtained in minimum quantities of one dozen without extra charge in the following B & S gauges: 18. 20 and 22 gauge 14. 16. 18 and 20 gauge 11. 13. 14 and 16 gauge 10 gauge 8 gauge

CROCHET FILES



Crochet No. 0

Crochet Files taper to a point in both width and thickness and are made with both edges well rounded. Double cut on the flat sides and on both edges.

Made in lengths of 3, 4, 6, 8 and 10 inches and in cuts Nos. 00, 0, 1, 2 and 4.

APPROXIMATE SIZES OF FINISHED FILES

4" 6" 8" 8" 3/3" 1/2" x 1/8" 5/8" x 5/3"

NICHOLSON

EXTRA+ X IF FINE

SWISS PATTERN FILES

KNIFE FILES

KNIFE FILES

KNIFE FILES

KRIFE No. 2

Knife Files are made from steel that is knife shaped, the included angle of the sharp edge being 10°. They taper in width and thickness to the point. Double cut on both flat sides and single cut on both edges.

Made in lengths of 3, 4, 5, 6 and 8 inches and in cuts Nos. 00, 0, 1, 2, 3 and 4.

APPROXIMATE WIDTH OF FINISHED FILES

3" 4" 5" 6" 8" 3'8" 15/32" 9/6" 11/6" 7/8"

BARRETTE FILES



Barrette Files are flat on one side, the back being beveled at both edges as indicated by the cross section, the included angle being 33°. Double cut on the wide flat side only, the back and the beveled edges being safe.

Made in lengths of 3, 4, 6 and 8 inches and in cuts Nos. 00, 0, 1, 2 and 4.

APPROXIMATE WIDTH OF FINISHED FILES

3" 4" 6" 8" 11/32" 1/2" 21/32" 7/8"

NICHOLSON NICHOLSON THREE SOUARE FILES CWISS PATTERN FILES SWISS PATTERN FILES Three Square No. 0

Three Square Files are triangular in section with angles of 60°, taper to a point and have sharp corners. Double cut on the three sides and single cut on the edges. Made in lengths of 3, 4, 5, 6, 8 and 10 inches and in cuts Nos. 00, 0, 1, 2, 3 and 4.

APPROXIMATE WIDTH OF FINISHED FILES

10"

METAL SAW FILES

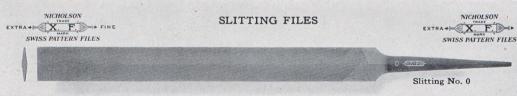
6 12-0xez Metal Saw No. 2

Metal Saw Files are the same in section as Three Square Files but are parallel throughout their length. Double cut on the three sides and single cut on the edges.

Made in lengths of 3, 4, 5, 6 and 8 inches and in cuts Nos. 0, 2 and 4.

APPROXIMATE WIDTH OF FINISHED FILES

8" 3" 1/2" 5/16" 5/32"



Slitting Files are made of double angular section, the included angle between the sides being approximately 15°. Double cut on the four sides and single cut on the two sharp edges.

Made in lengths of 4 and 6 inches and in cuts Nos. 00. 0 and 2.

APPROXIMATE WIDTH OF FINISHED FILES

4" 6" 7/16" 19/32"

HALF ROUND RING FILES



Half Round Ring No. 00

For use by jewelers, particularly ring manufacturers, Half Round Ring Files are 6 inches in length and are made in cuts Nos. 00, 0, 1, 2 and 4.

The dimensions of the finished files are 29/64" x 7/64".

OMPAN NICHOLSON E

NICHOLSON SWISS PATTERN FILES

HALF ROUND FILES

NICHOLSON SWISS PATTERN FILES



Half Round No. 00

Half Round Files taper in width and thickness to the point. Double cut on both flat and half round sides. Made in lengths of 3, 4, 5, 6, 8, 10 and 12 inches and in cuts Nos. 00, 0, 1, 2, 3, 4 and 6.

APPROXIMATE SIZES OF FINISHED FILES

CROSSING FILES





Crossing No. 4

Crossing Files are made of double circular section, one side having the same radius as the Half Round File and the other side having a flatter curve or larger radius. They taper to a point in both width and thickness. Double cut on both sides. Made in lengths of 3, 4, 6, 8 and 10 inches and in cuts Nos. 00, 0, 1, 2, 3, 4 and 6.

APPROXIMATE SIZES OF FINISHED FILES

NICHOLSON

EXTRA + NICHOLSON

NICHOLSON

TRADE

NARK

SWISS PATTERN FILES

ROUND FILES

NICHOLSON

THADE

XTRA + X. F. SH FINE

SWISS PATTERN FILES

Round No. 2

Round Files taper throughout their length to a fine point. Double cut.

Made in lengths of 3, 4, 5, 6, 8, 10 and 12 inches and in cuts Nos. 00, 0, 1, 2, 3, 4 and 6.

APPROXIMATE WIDTH OF FINISHED FILES

3'' 4'' 5'' 6'' 8'' 10'' 12 5/4'' 1/4'' 21/64'' 27/6

ROUND STRAIGHT FILES

0 4

Round Straight No. 0

Round Straight Files are made of the same sizes of steel as Round Files but are parallel throughout their length. Double cut.

Made in lengths of 4, 5, 6 and 8 inches and in cuts Nos. 00, 0, 2 and 4.

APPROXIMATE WIDTH OF FINISHED FILES

4" 5" 6" 8" 1/8" 5/32" 3/16" 1/4'

The diameters given above are regular, and are furnished unless the customer specifies otherwise. Round Straight Files are also furnished in the following diameters, in minimum quantities of one dozen of the same size and cut, at no advance over regular prices: 4"—1/6", 3/3"; 5"—3/3", 1/6"; 6"—1/8", 5/2", 7/3", 1/8", 5/2", 7/3", 1/8"; 8"—3/6", 5/6", 3/8".

NICHOLSON

TADOT

PIPPIN FILES

Pippin No. 0

Pippin Files have rounded backs tapering to a sharp edge and they taper in both width and thickness to a point. Double cut. These files are sometimes called "Apple Seed" files.

Made in lengths of 4, 6 and 8 inches and in cuts Nos. 00, 0, 1 and 2.

APPROXIMATE SIZES OF FINISHED FILES

4" 6" 8"' 9/32" x 1/8" 3/8" x 5/32" 1/2" x 3/16"

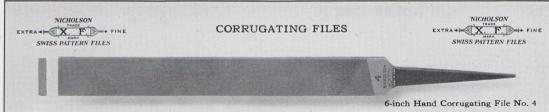
PILLAR TESTING FILES



Testing Files are made especially to be used as standards for testing the hardness of tempered tools or metals. Double cut with a special form and style of tooth particularly adapted to the very severe work for which these files are designed.

Made in Pillar section 6 inches in length, cuts Nos. 0 and 1; and in Pillar Narrow section 8 inches in length, cuts Nos. 0 and 1.

ILE COM CHOLSON F



Corrugating files are made for corrugating the edges of Barbers' Shears and other edged tools.

6" Hand Corrugating files, also called Straight Rowing files, are made in cuts Nos. 0, 2 and 4. They are designed to corrugate the blade when stroked straight across or, in other words, at right angles to the blade.

6" Pillar No. 2 files are also widely used for corrugating. These files will corrugate when allowed to glide to the left from the point toward the heel of the blade.

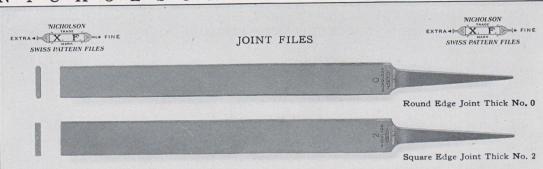
SCREW HEAD FILES



Screw Head Files are made for enlarging and clearing out the slots in the heads of screws. Used principally by watch makers and jewelers. They are made in two styles, Plain and Tanged.

Made in one size only, 3 inches long and in one cut.

ILE OLSON F H



Joint Files are parallel in width and thickness and are made with round or square edges, thick or thin. Double cut on the edges only, the sides being safe.

Made in lengths of 4 and 6 inches and in cuts Nos. 0 and 2.

APPROXIMATE SIZES OF FINISHED FILES

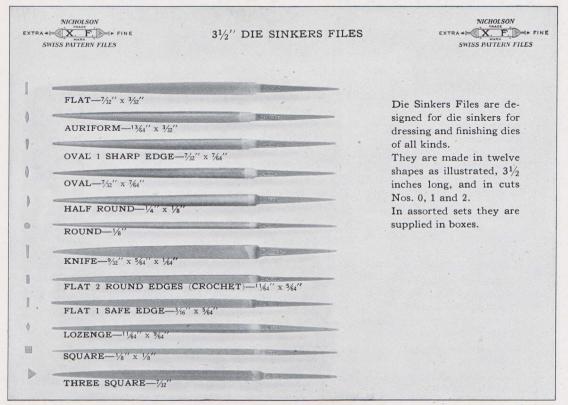
JOINT FILES WITH ROUND EDGE are made in the following B & S gauges, at regular prices:

10. 12. 14 and 16 gauge 9 to 26 gauge

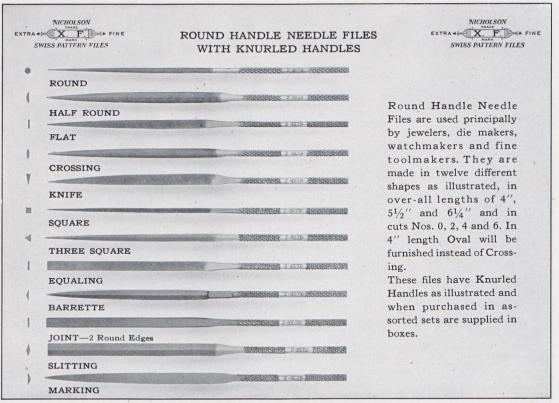
JOINT FILES WITH SQUARE EDGE are made in the following B & S gauges, at regular prices:

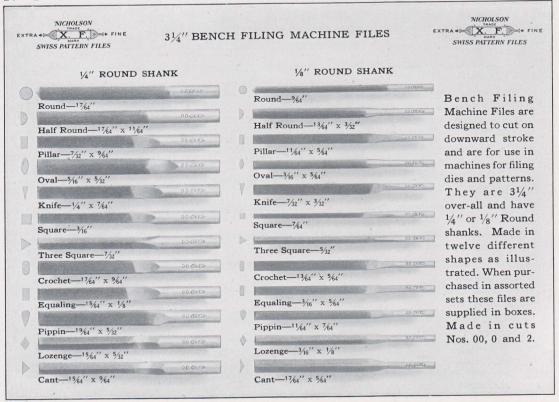
16, 18 and 20 gauge

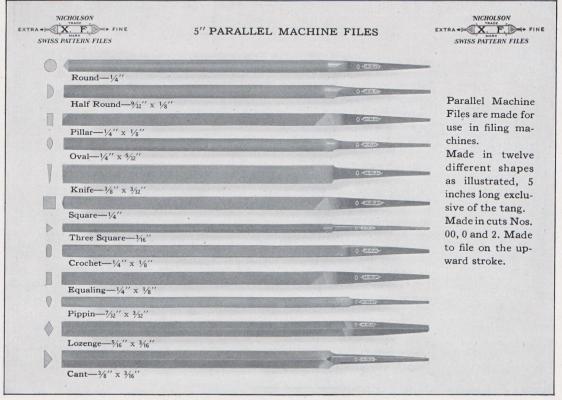
10, 12, 14 and 16 gauge

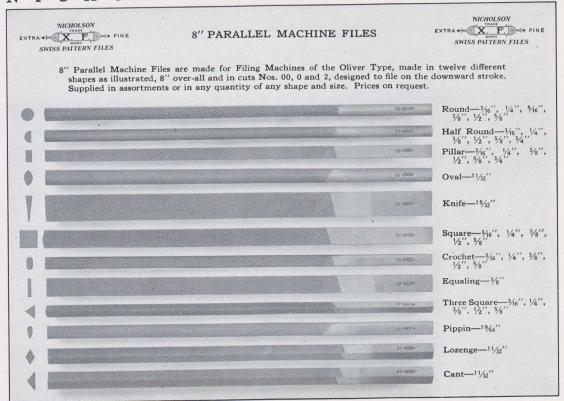


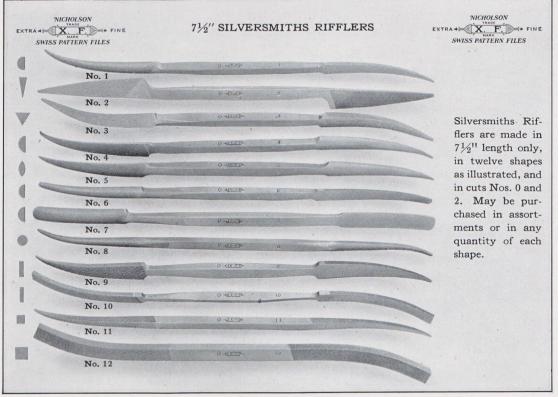
NICHOLSON XTRA+ X. T. FINE SWISS BITTERN FILES SWISS BITTERN FILES 5½" SQUARE HANDLE NEEDLE	FILES EXTRA+ X X X X X X X X X X X X X X X X X X X
SLITTING	
CROSSING	Square Handle Needle or Escapement Files are
KNIFE	made especially for watch
SQUARE	They are made in twelve
ROUND	different shapes as illus- trated, in one size only,
EQUALING	5½ inches over-all, and in cuts Nos. 0, 2, 4 and 6.
JOINT—2 Round Edges	
HALF ROUND BLUNT	
HALF ROUND	
BARRETTE	
THREE SQUARE	

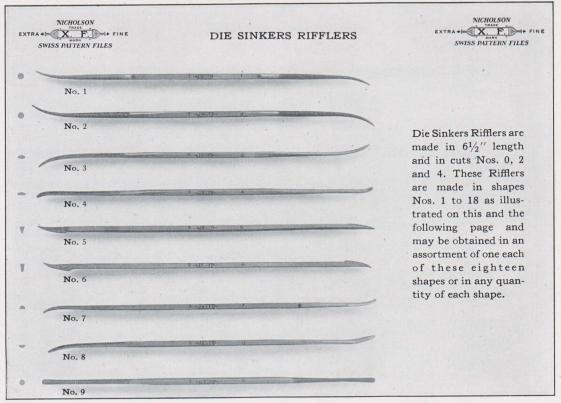




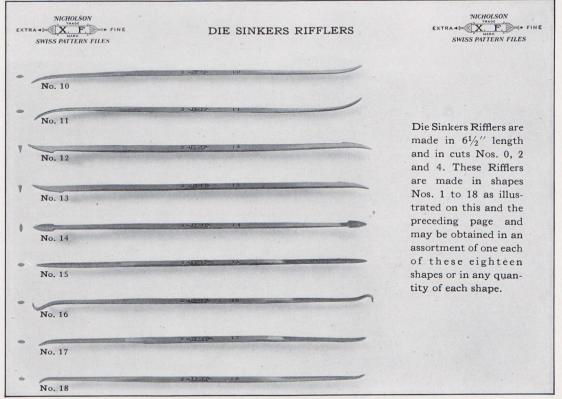




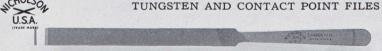




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	auge Diam. 65 .035"		Gauge		
			Gauge	Diam.	
· American construction			52	.0635′′	
	64 .036''		51	.067′′	Broach Files are
	63 .037"		50	.070′′	made in round section, parallel
	62 .038"		49	.073′′	throughout their lengths.
	61 .039"		48	.076′′	Made in one
	60 .040"		47	.0785′′	length only, 3 inches over-all
	59 .041"		46	.081′′	and in one cut,
	58 .042"		4,5	.082′′	which is approx- imately the same
	57 .043"		44	.086′′	as the cut on a 3" Round No. 0.
	56 .0465"		43	.089''	
	55 .052"	•	42	.0935''	
	54 .055"		41	.096′′	
•	53 .0595"	•	40	.098′′	





Nicholson Tungsten Point File



Nicholson Contact Point File

Nicholson Tungsten Point Files are for dressing distributor points that are tipped with Tungsten, Iridium or other similar metals. These Files are 51/4" over-all and are double cut. They have a chisel tip to conveniently enter slots or gaps and the extreme end of the handle is a thickness gauge for Spark Plugs. Supplied with Orange Handles.

Nicholson Contact Point Files are for cleaning dirt and corrosion from contact points and spark gaps of magnetos, coils, electric bells, switches, etc. These files are 51/4" long and are also double cut.

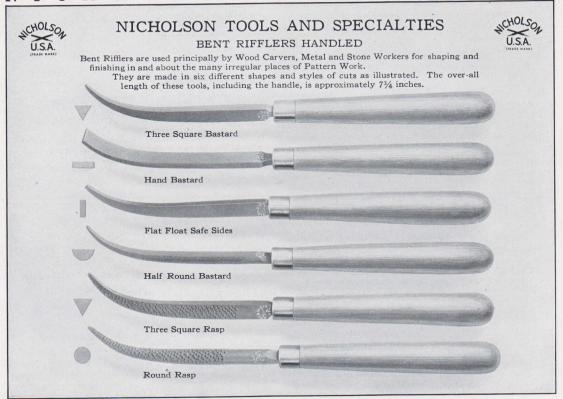
NICHOLSON TOOLS AND SPECIALTIES

SURFACE FILE HOLDER

The Surface File Holder is designed to hold files for service in surface filing and has the added advantage of enabling the user to give convexity to the working face of the file.

Made in two sizes, No. 4 for files 12 and 14 inches long, and No. 5 for files 14 and 16 inches long.





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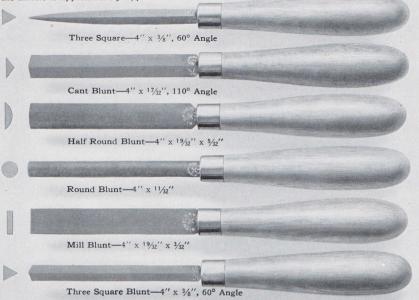


NICHOLSON TOOLS AND SPECIALTIES



MACHINISTS SCRAPERS

Machinists Scrapers are made in six shapes as illustrated which are sufficiently varied to make them adaptable to a wide range of work. They are furnished "dead hard." The over-all length of these tools including the handle is approximately 91/4 inches.





NICHOLSON TOOLS AND SPECIALTIES



FILE CLEANERS

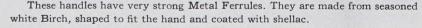
These File Cleaners are made in two styles as illustrated. The File Card with Scorer for more general use and the File Brush (combining the Brush, Card and Scorer) for use especially on the finer cut files. The Scorer is made of soft iron and is used to remove the pins which fill up and clog the teeth of files causing scratches in the work if not removed. The over-all length of these Cleaners is 10 inches.





NICHOLSON TOOLS AND SPECIALTIES

METAL FERRULED HANDLES



SIZE No. 00 is for 16" files but may be used on some 14" files such as Hand and Half Round or other files having large tangs.

SIZE No. 0 is for 14" files such as Flat, Mill, Round, Square, Three Square, Pillar and for 12" Hand, Half Round and Pillar Files.

SIZE No. 1 will fit many of the $10^{\prime\prime}$ and $12^{\prime\prime}$ files such as $10^{\prime\prime}$ Hand, Half Round, Pillar, $10^{\prime\prime}$ and $12^{\prime\prime}$ Warding, and $12^{\prime\prime}$ Mill, Flat, Round, Square, Three Square and Knife Files.

SIZE No. 2 is used on a variety of $8^{\prime\prime}$ to $10^{\prime\prime}$ files including $8^{\prime\prime}$ Hand, Half Round, $8^{\prime\prime}$ and $10^{\prime\prime}$ Taper and Three Square, $9^{\prime\prime}$ and $10^{\prime\prime}$ Flat and $10^{\prime\prime}$ Mill, Round and Square Files.

SIZE No. 3 is for $6^{\prime\prime}$ to $8^{\prime\prime}$ files and will fit such files as $6^{\prime\prime}$ and $7^{\prime\prime}$ Hand, Half Round, Taper, Three Square, $6^{\prime\prime}$ and $8^{\prime\prime}$ Flat, $7^{\prime\prime}$ and $8^{\prime\prime}$ Mill, Pillar and Warding and $8^{\prime\prime}$ Round and Square.

SIZE No. 4 is for files 6'' and smaller but is also used on some longer files such as 7'' Extra Slim, 7'' Round and Square and 8'' Double Extra Slim Files.



Metal Ferruled Handle No. 0

APPROXIMATE SIZES IN INCHES

No. 00 No. 0 No. 1 No. 2 No. 3 No. 4 $5\frac{7}{6}$ " x $1\frac{9}{6}$ " 5 $\frac{1}{6}$ " x $1\frac{9}{6}$ " 5 $\frac{1}{6}$ " x $1\frac{9}{6}$ " 4 $\frac{1}{6}$ " x $1\frac{1}{4}$ " 4 $\frac{1}{4}$ " x $1\frac{1}{4}$ " 4 $\frac{1}{4}$ " x $1\frac{1}{6}$ " 4 $\frac{1}{6}$ " x $1\frac{1}{6}$ " 6 $\frac{1}{6}$ " x $\frac{1}{6}$ "

ALPHABETICAL INDEX

The figure in the "inches" column indicates that files of that length and shorter are packed one dozen in a box. All over that length are packed six in a box.

Inches	Page	Inches	Page
Aluminum Files, Type A 8	19	File Cleaners: Cards & Brushes (1/2 doz.)	60
	20	File Handles (1 doz.)	61
Aluminum Files, Nos. 75 and 76 (½ doz.)	20	File Holders (1 only)	57
Armory Cut Files No. 204, Flat (1/2 doz.)	20	Flat Files 8	14
Bandsaw Blunt Regular 8	12	Flat Aluminum Type A 8	19
Bandsaw Blunt Slim (1 doz.)	12	Flat Aluminum Nos. 75 and 76 (1/2 doz.)	20
	12	Flat Armory Cut Files No. 204 (½ doz.)	20
Bandsaw Taper Regular (1 doz.)	12	Flat Brass Files 8	18
Bandsaw Taper Slim (1 doz.)	39	Flat Lead Float Files 8	14
Barrette (X.F.)	30	Flat Long Angle Lathe Files 8	19
Beaver Curved Tooth (1/2 doz.)	50	Flat Shear Tooth Files 8	18
Bench Filing Machine Files (X.F.) (1 doz.)	58		30
Bent Rifflers (½ doz.)	58	Flat Tanged Beaver (½ doz.)	31
Body Files (See "Beaver" and "Superior") Brass Files 8	10	Flat Tanged Superior 8	28
Brass Files 8	18	Flat Wood Rasps 8	30
Broach Files (X.F.) (1 doz.)	56	Flexible Beaver (½ doz.)	31
Brushes, File (½ doz.)	60	Flexible Superior	33
	26	Foundry Files	
Cabinet Rasps 8		Half Round 8	16
Cabinet Rasps & Files, Last Makers 8	27	Half Round (X.F.) 6	42
Cabinet Rasps, Pattern Makers 8	27	Half Round Aluminum Type A 8	19
Cabinet Rasps, Round	30	Half Round Brass Files 8	18
Cantsaw Files	13	Half Round Lead Float Files 8	16
Cards, File (1/2 doz.)	60	Half Round Ring Files (X.F.) (1 doz.)	41
Contact Point Files	57	Half Round Shoe Rasps (½ doz.)	27
Corrugating (X.F.) (1 doz.)	45	Half Round Tanged Beaver (½ doz.)	30
Crochet (X.F.) 6	38	Half Round Tanged Superior 8	31
Crosscut	13	Half Round Wood Rasps 8	28
Crosscut, Special	9		21
Crossing (X.F.) 6	42	Hand	35
		Hand (X.F.) 6	45
Die Sinkers Files (X.F.) (1 doz.)	47	Hand Corrugating (1 doz.)	21
Die Sinkers Rifflers (1 doz.)	54, 55	Hand Finishing (½ doz.)	61
Doctor Blade Files (1/2 doz.)	20	Handles, Metal Ferruled (1 doz.)	12
Double Enders (1 doz.)	11	Handsaw Blunt Extra Slim (1 doz.)	12
Double Extra Slim Tapers (1 doz.)	11	Handsaw Blunt Regular (1 doz.)	12
Drill or Joint Files (1 doz.)	46	Handsaw Blunt Slim (1 doz.)	29
Dim of John Phes (1 doz.)		Horse Rasps, Plain (½ doz.)	
Fqualing (X.F.) 6	37	Horse Rasps, Plain Slim (1/2 doz.)	29
Escapement Files (1 doz.)	48	Horse Rasps, Tanged (1/2 doz.)	29
Extra Slim Tapers (1 doz.)	11	Horse Rasps, Tanged Thin (1/2 doz.)	29
Extra Sinii Tapers (1 doz.)			

ALPHABETICAL INDEX-Continued Inches Inches Page Page Igint or Drill (X.F.) (1 doz.) 46 28 30 Rasps Wood 25 Rifflers, Bent (1/2 doz.) Rifflers Die Sinkers (X.F.) (1 doz.) 54. 55 30 53 Rifflers, Silversmiths (X.F.) (1 doz.) 27 Last Makers Rasps & Files 8 Ring, Half Round (X.F.) (1 doz.) 41 Lead Float, Flat 8 14 22 Lead Float, Half Round 8 16 Round (X F.) (1 doz.) 43 13 30 Long Angle Lathe Files 10 Round Handle Needle Files (X.F.) (1 doz.) 40 43 59 Machinists Scrapers (1/2 doz.) 30 Metal Saw (X.F.) 6 40 45 8 27 0 53 a Milled Curved Tooth, Superior 10 11 31 41 Q 40 Needle Files, Round Handle (X.F.) (1 doz.) 23 Needle Files, Square Handle (X.F.) (1 doz.).... 48 37 Square Handle Needle Files (X.F.) (1 doz.) 48 Oliver Type of Filing Machine Files 33 52 31 32 Parallel Machine Files (X.F.) (1 doz.) 51, 52 57 Surface File Holders (1 only) Pattern Makers Rasps 8 27 24 11 Pillar (X.F.) 6 35 Tapers, Double Extra Slim (1 doz.) 11 Pillar Extra Narrow (X.F.) (1 doz.) 36 11 Pillar Narrow (X.F.) 6 36 11 Pillar Narrow Testing (X.F.) (1/2 doz.) 44 11 44 24 13 Three Square (X.F.) 6 40 27 Planer Knife Files (1 doz.) 57 25 26 38 29 12 27 Rasps, Last Makers 8 64 Rasps, Pattern Makers 8 27 Wood Rasps, Flat and Half Round . . . 8 28 30 30 27

APPROXIMATE WEIGHTS PER DOZEN IN POUNDS AND OUNCES

AMERICAN PATTERN FILES

	3"	4"	41/2"	5"	51/2"	6''	7''	8''	9"	10"	12"
Taper						2-	3- 2	4- 4		7- 8	,.
Slim Taper		- 5		- 9		-15	1-11	2-11			
Extra Slim Taper		- 4		- 7	- 9	-11	1- 2				
Double Extra Slim Taper		- 3		- 5		- 7	-11	1- 1	12122		
Double Ender							-12	1- 5	1-15	2- 6	
Crosscut								3- 6		6-	
	4"	5"	6"	7''	8''	10"	12''	14"	16''	18"	
Mill Regular	- 6		1- 3	1-15	2-11	5- 4	9- 1	13- 2	20-10		
Special Crosscut			1- 3	2-	2-14	5- 5					
Flat	- 9		1-10		3-10	7-	11- 9	18- 8	27- 1	36-8	
Half Round	-10		1- 7		3- 2	5-13	9-14	16-	22-12		
Hand			2- 4		4-11	8-14	14- 5	21- 5	31-8		
Round	- 4		-12	1- 3	1-12	3- 4	6-12	12-	19- 8	22	
Square	- 4		-14		1-15	3-13	8-8	15-	25-	39-	
Knife	- 7		1-		2- 3	4- 3		'			
Warding	- 5		-12		1- 9	2-14	:::::		36		
Flat Wood Rasp					3- 9	7-	11-10	18-11	26-8		
Half Round Wood Rasp			1- 8		3- 4	6-	10- 6	16-12	24- 2		
	12"		14"	15''	16"	18"					
Plain Horse Rasp	13-12		17-10		26-11						
Plain Horse Rasp—Slim						25-15					
Tanged Horse Rasp	17- 6		26-								
Tanged Horse Rasp-Slim											
Tanged Horse Rasp-Thin			23-4								

X. F. SWISS PATTERN FILES

	3"	4"	5"	6"	8"	10"	12"
Pillar	- 5	-10		1-10	3-8	6- 3	9-12
Pillar Narrow	- 4	- 8		1- 4	2-10	5- 3	8-8
Pillar Extra Narrow	- 3	- 5		-13	1-15	3-11	6-
Half Round	- 4	- 8	-12	1-4	2-11	6-3	9-8
Round	- 1	- 4	- 6	-11	1- 5	2-11	4-10
Three Square	- 3	- 6	-11	1- 1	2-10	4-11	
Hand	- 7	-14		2- 5	4-9	8-	14- 8
Square	- 2	- 4		-10	1-8	3-	6- 3
Warding	- 3	- 5		-13	1-10	2-15	
Knife	- 4	- 7	-11	1- 2	2- 3		

